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ABSTRACT

This document comprises two papers. The first, by Professor Martin Carnoy of Stanford University, provides a dialectical view of the socialization functions of schooling. In the first part of his paper, Carnoy relates how the dialectical model best explains the historical mechanisms by which the socialization functions of schooling developed, and the particular role of schooling in serving the capitalist social order. The dialectical model is based on three variables: the basis of organization of the economy, the structure of labor markets resulting from that organization, and the correspondence between institutions of socialization and the economic and social needs of society. The bulk of Carnoy's long paper explores the objectives of capitalist production and their relationship to social class differences and conflicts. The second paper is by Professor E. G. West of Carleton University in Ottawa, Canada. He briefly questions the statistical proofs and reasoning processes by which Neo-Marxists conclude that the capitalist class dominates society and manipulates the public schools. (Author/AV)

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A TANDEM PAPER--

CLASS, SCHOOLING, AND PRODUCTION: A DYNAMIC MODEL OF OCCUPATIONAL SOCIALIZATION

MARTIN CARNOY

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THE RADICAL ECONOMICS OF PUBLIC SCHOOL BREAKDOWN: A CRITIQUE

E. G. WEST

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To examine ideology in public schooling, Stanford University professor Carnoy provides a dialectical view of the socialization functions of schooling -- particularly the role of schools in serving the capitalist society.

In contrast, Professor West joins in debate as he scrutinizes the diagnoses and remedies of the Neo-Marxist critics. He questions their statistical "proof" and reasoning processes which lead to their conclusion of capitalist class dominance and capitalist manipulation of the public schools.

Both papers were presented at the Center for Independent Education and Liberty Fund conference on "The Ideology of Public Schooling" at Case Western University in November 1975.

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I. SOCIETAL MODELS

We know that people are socialized into the world of work. Children are not born workers; they are made into them. Various institutions contribute to this process--the family, the child's economic environment, the school, and the place of work itself. Almost all social psychologists agree that this process takes place (though there is disagreement on when in a person's life the socialization process ends (see Inkeles, 1975), but the explanation of how it takes place requires the tying of socialization theories to theories of the development of social systems.

In this context, we can outline three alternative models of socialization for work (with particular focus on the role of the schools): 1) the human potential view; 2) the socialization for competence view; and 3) the dialectical view.

The human potential view is based on the underlying tenet that each individual is endowed genetically with latent talents. When left to the family, church, and community--the traditional agents of socialization--many of these traits might never be developed; that is, without the school as an agent of the State--an interventor attempting to equalize opportunity--such latent traits would be forever entrapped in common men who neither developed their own potential nor contributed to society in a way that their genetic capability made possible. In the human potential view, therefore, schooling as an institution of socialization plays the role of developing the possibilities of genetic endowment in ways which the family and other institutions do not do. The concern is with the special individuals in any class who would not realize their potential without some intermediary between the traditional agents of socialization and the work place. Thus, schools are seen as a liberating agent for these individuals, releasing them from their preparation for tasks associated with their traditional class background. Yet, the human potential approach has little relationship to preparation for work. That is, there is no strong rationale for schooling based on preparation for careers; although it was tacitly assumed that if individuals could fulfill their potential to be literate and to develop other talents, these would undoubtedly contribute to mastery of skills in the workplace.

In contrast with the human potential view, socialization for competence is based upon the assertion that adult society requires certain adult capabilities that must be satisfied to produce competent adults (see Lerner, 1963 and Inkeles, 1975). Schools need not exist in more traditional societies, because the family, church, community, and workplace are perfectly capable of preparing people for adult roles.

But as society becomes more complex and technical by inexorably industrializing and "modernizing," a new institution must emerge to prepare people for the industrialized structure of production and resultant social institutions. The school fills that role: it creates the personality and cognitive traits that enable individuals to function effectively in bureaucratic work organizations. Schools are indeed the primary mass-socializers for the world of work, and the correspondence between schools as bureaucratic, complex institutions and the workplace is a deliberate attempt to provide competent workers (for a description of such correspondence, see Dreeben, 1969). Since adult competencies are reflected in universal traits required for all persons in order to function effectively, class differences in the acquisition of these competencies--while theoretically possible--are omitted from this approach. More important, there is no conflict over who gets what competencies, since there is no scarcity of this universal set of traits; while some individuals may be super-competent, everyone in an industrializing society can be made somewhat competent--it is mainly a matter of taking everyone far enough in school.

Both the human potential and socialization for competence views have serious shortcomings: The human potential interpretation legitimizes inequalities and argues for a lack of connection between the spread of the factory system and the need for large numbers of workers to be integrated into the wage labor system. It sees the development of schooling as a result of a philosophical commitment to individual freedom and opportunity.

The competency view is also ahistorical: it is not a dynamic model, nor does it show any evidence of how the correspondence between agencies of socialization like the school and adult competencies develop. Rather, this view emerges from a mystical conception of a super-rational society which provides the complex institutions that fulfill its needs. Nor is there any explanation of how the particular set of competencies associated with "modernism" arose. The assumption of the competency model is that the path leading to the narrow technical and social division of labor under industrialization is an inevitable outgrowth of modernism and "progress."

As an alternative to these models, we propose a dialectical view of the socialization process. This view, we contend, provides a much more cohesive and comprehensive explanation of the historical conditions and mechanisms by which the socialization functions of schooling developed, and the particular role of schooling in serving the capitalist order. Unlike the other two models, it directly faces the issues of the origin of the objectives of socializa-

tion and how these objectives are transmitted to the people to be socialized.

Our dialectical model of occupational socialization hinges on three important variables: 1) the basis of organization of the economy; 2) the structure of labor markets resulting from that organization; and 3) the correspondence between institutions of socialization and the economic and social "needs" of the society.

The organization of the economy. A capitalist economy like the United States is organized on the basis of the maximization of profit, and, along with other capitalist and non-capitalist economies alike, attempts to reproduce the hierarchy and legitimacy of the social order which corresponds to the existing organization of production--in this case of capitalism.

What is that social order? Pro-capitalist intellectuals stress the relative individual freedom and social mobility in capitalist societies, arguing that under capitalism each person can choose occupational roles (including becoming a capitalist) based on acquired skills and personal motivation. Furthermore, a capitalist economy, with its market system of prices, allows an "optimal" allocation of resources to competing ends, and wages and prices are determined by the laws of supply and demand of these resources, including worker skills.

On the other hand, capitalism can be viewed as an organization of production which allows relatively little mobility, especially between the worker and capitalist portions of society, as an organization of production in which the "rational" allocation of resources is undertaken on the basis of economic power derived from capital ownership and the control of information in a way which favors those with capital, and as an organization of production in which there is an inherent conflict between the owners of capital (and their managers) and those who only own labor power. In this view, the model of social behavior is defined by the existence and opposition of the two classes, capital owners and labor, and even if there are segments or fractions of these two principal classes, the logic and dynamic of this view of capitalism is that the welfare of one class is maximized at the expense of the other.

It is this view of capitalist society which is the basis of our socialization model. The driving force behind the development and characteristics of capitalist society, we assume, are capitalists. They attempt to set the rules of the game for behavior in such a society--the protection of property, the rights of individuals in conflict with property, the rights of individuals in the work place, etc.--and attempt to control the means to enforce those rules when there is conflict. These rules are designed to maximize profits to owners

of capital and to reproduce the capitalist hierarchy from generation to generation. All this implies control of more than just capital: to set rules, to enforce rules, and to reproduce the rules from generation to generation means that owners of capital must control the State apparatus, since it is this apparatus which has been given, in capitalist societies, the power to tax, to raise armies and police, to pass laws, and to enforce the laws.

Now this is not to say that capitalists are completely successful in their attempt to achieve control and reproduction. The opposition of classes implies that there is conflict and there is contradiction. As capitalism develops, changes occur and these changes produce reaction and response; new institutions are developed by a capitalist-dominated State apparatus as a response to new forms of class conflict; the nature of production also changes. In some periods of time, workers as a group gain enough power to force capitalists to compromise and the share of product going to the capitalist class declines; in part this occurs because capitalists themselves are not united in their strategy of response to conflict and contradiction; yet despite these differences in strategy, response is dictated by the common goal among capitalists of maintaining and increasing the long-run profitability of capital.

The structure of labor markets. The class conflict view of capitalist organization of society also poses an alternative to the neo-classical model of production as a process in which the division of labor is determined primarily by technical considerations and the structure of wages set exogenously to the firm. The neo-classical explanation, consistent with its theory of the "optimal" allocation of resources, treats the labor exchange as a pure market exchange, and except for the intervention of the capitalist in an organizational and financial role, does not differentiate the pre-capitalist exchange relationship between the consumer and laborer from the present split-exchange relation (Carnoy, 1975). The alternative interpretation views the firm as a socio-political unit as well as a technical organization. In that unit the capitalist does more than serve as a simple organizational intermediary; he has power over the workers, coercive powers which enforces the wage contract for the purpose of maximizing coercive powers which enforces the wage contract for the purpose of maximizing profits. Both capitalists and workers attempt to alter this power relationship, workers by organizing into unions and political parties (to try to exert power over the State in their favor); capitalists by using direct coercive action (private policy for example) and attempting to use the State to keep workers from organizing for higher wages, to promote immigration, and to pass laws favorable to the protection of private property rather than the protection of workers' health, safety, and well-being. All

of these measures will tend to increase profits more rapidly than increases in wages. Thus, the structure of wages is not exogenous to the firm, but is rather a bargaining point which can--if the capitalist can increase his political power relative to that of workers--raise profits.

Within this alternative view of the firm and the economic system, several economists (Reich, Gordon, and Edwards, 1973; Braverman, 1974; Stone, 1974) have argued recently that once the competitive phase of capitalist expansion in the United States waned and the transition to monopoly capitalism began, a series of important changes took place in the organization of work and the structure of wages, and that these changes took place in each sector as it became monopolized. Why and how did the changes occur? The interpretation given by these economists is that corporate managers were conditioned by the more permanent nature of the monopoly firm's position in the market to take a much more long term view than that of the competitive entrepreneur of how best to maximize the firm's profit and devise work structures which fit this view. Furthermore, the growth of large monopolies was paralleled by militant labor movements, and as the level of the conflict escalated through the 1890s and the early part of the twentieth century, it became not just a struggle over higher or lower wages per se, but, according to Stone (1974) and Braverman (1974), over the rights of workers to organize and to participate in the setting of wages. Even in the conflict with basically capitalist system supportive unions like the AFL, employers saw the union movement as a challenge to their right to bargain with workers individually and their prerogative to set wages. The increasing importance of socialism in the labor movement extended the meaning of the struggle to the very right to own productive property and the very existence of the capitalist class as society's dominant elite.

All employers considered it essential to keep unions out of their plants wherever possible, but it was the large companies which had the financial power to do this effectively--a monopoly could withstand a long strike; it could import labor from far away (the steel makers brought in black labor from the South during the 1919 steel strike, for example); it could hire private police; and it had connections in the government to bring in military forces. These large corporations, because of their long-term production horizons and greater economic power, also had more freedom to plan longer term management strategies which would effectively control labor. Gordon, Edwards, and Reich suggest that wage and job promotion incentives raised productively in the short run and in the longer run, pitted workers against each other in the quest for more wages and higher positions on job ladders. Employers also manipulated racial,

ethnic, and sexual antagonisms "to legitimize the new divisions within the firm." (Gordon, Reich, and Edwards, 1973, p. 75)

They contend, further, that the more progressive corporations found this kind of internal manipulation much more effective than costly labor wars, which not only cost the company money in lost labor time, but created long-term class solidarity among workers and antagonism toward the company. Job ladders and wage incentives, as well as the separation of workers among different ladders and the exploitation of antagonisms among workers, were therefore designed to prevent labor organizing and subsequent strikes from occurring. If the workers were concerned primarily with their own individual welfare in the hierarchy of jobs, they would not be worried about the general level of wages paid in the industry. That concern would affect only the most unskilled workers, and they were the most replaceable with immigrant and black unemployed.

Thus, labor market "segmentation," according to this analysis, was primarily a response to labor's demand for an increasing share of total output. By dividing workers into different groups, one group set off from another by different job ladders and wage scales, groups of workers became much more concerned with winning small, achievable gains even at the expense of other workers than with participating in a mass workers' movement against capitalists. Capitalists and managers, on the other hand, promoted and attempted to legitimize organizations of production and a social order in which the principal conflicts developed between groups of workers rather than between workers as a whole and capitalists and managers.

Stone and Gordon, Edwards, and Reich suggest that managers also instituted job ladders within types of work as a further incentive to higher productivity. Of course, jobs higher in the ladder paid more, but often the pay increase was not as important as the decreasing physical difficulty of the task or its prestige and security. As Stone argues,

> The establishment of a job ladder had two advantages, from the employers' point of view. First, it gave workers a sense of vertical mobility as they made their way up the ladder, and was an incentive for workers to work harder. Like the premium plan, the promise of advancement was used as a carrot to lure the men to produce more and more (Stone, 1974, p. 134).

Furthermore,

> The other advantage of the job ladder arrangement was that it gave the employers more leverage with which to maintain discipline. The system pitted each worker

> against all the others in rivalry for advancement and undercut any feeling of unity which might develop among them. Instead of acting in concern with other workers, workers had to learn to curry favor with their foremen and supervisors, to play by their rules, in order to get ahead (Stone, 1974, p. 134).

It has been argued by others, notably Doeringer and Piore (Doeringer and Piore, 1972), that such job ladders, entry points, and other features of "internal" labor markets were the result of new technology. However, there is little evidence that the higher jobs in each of the ladders in these internal hierarchies requires the amount of training signified by the amount of seniority which each next step features. Stone cites a 1918 industrial management textbook which argued that "dead-end" jobs were harmful to productivity, but that "The work itself is not under attack as much as the lack of incentive and appeal in the scheme of management." (Bloomfield, cited in Stone, 1974, p. 133.) Indeed, it seems from Stone's and Braverman's work that the new technology and the scientific management which followed it reduced the skills required for particular jobs rather than increasing the amount of training necessary for production. While new jobs might be created by the introduction of a new product, these jobs were broken down into separate, simpler tasks as rapidly as possible in order to reduce wages paid to increase control over the work process.

Furthermore, while it can be argued that the different ladders and entry points in the job structure were set by technological criteria, Stone's and Braverman's studies again indicate that in most types of work, the training required for each of many entry points was similar and that there was little to prevent workers in one part of the production process to move to another part and quickly learn the operation (see Maltese, 1973 on the separation of foundry from assembly workers at Ford).

Monopoly capitalism was characterized by another division of labor which was new to the organization of production: the efforts to rationalize external markets and internal production created a management bureaucracy in the firm whose primary function was controlling the firm's operation. This control bureaucracy had its own hierarchy, or job ladder, which was placed above the production hierarchies in the overall job structure of the firm. Whereas during the competitive phase of capitalist expansion, all or most of the managerial functions of the firm were carried out by the capitalist himself with the foreman supervisors on the production floor, the monopoly corporation not only required more managers because of its size

and extensive holdings, but needed them to market its products, coordinate the production and internal sales of its vertically integrated plants, scientifically manage its work force to increase productivity, and manage lower level managers to insure that each division was coordinating with other divisions. Higher level management became developers of corporate ideology and acted to change American and even world society to fit their corporate view of human relations. They had little to do with day-to-day production and sales decisions, although boards of directors did deal with financial matters, and with product development, and vertical integration.

These administrative personnel were put on almost completely separate job ladders from production workers. Usually the entry points of their jobs required higher levels of schooling, apparently not so much because of the skills required for the jobs (although there is some work, like engineering, that requires specific skills), but primarily because this kind of work was associated with a different social class than a production worker, and many of the tasks of management have to do with furthering the advancement of corporate profits against the interest of the workers. It was therefore necessary to draw white collar and management personnel from groups which disassociated themselves (or were <u>willing</u> to disassociate themselves) from production workers. Otherwise, management could not function, particularly in the troubled capital/labor conflict years up to the 1940s. But even since that time, the scientific management mission of that part of the firm's administration which concerned itself with labor has invariably led those personnel to put the cause of the company and their professional interests (which they identify with profit increases rather than the improvement of working conditions or wage increases) ahead of worker interests, including health and safety, job security, job satisfaction, and wages.

<u>Correspondence and contradiction</u>. The structure of the labor market we have described implies the "necessity" (from the point of view of capitalists and managers) of a hierarchy of skills and attitudes in the labor force: if labor market segmentation was to be an effective means of dividing the labor force so as to preserve long term control of capital by capitalists and to preserve a high share of product going to capital, workers in different kinds of jobs had to be inculcated with the values pertinent to their job segment and to see themselves as separated by their knowledge and aptitudes from other segments.

The nature of the work place itself, hierarchically structured in job ladders, entry points, and the separation of management (with its white collar periphery) from production workers, is crucial to the development of these values. Even if a worker

came completely unsocialized to a corporate firm, he or she would eventually learn the reward system of the firm, including the behavior patterns which get approval. Of course, if the firms had to draw completely on an unsocialized work force, this would greatly increase the chances of drawing workers who are unsatisfied with the conditions of work, the nature of the job, and the relationship to workers in other segments. They might not understand why management and supervisors have the right to tell them how to do their job, especially in ways that do not seem fair or efficient, and they might not understand the rationality of the wage structure in the firm. Lack of socialization in our model would imply a decrease in the degree of control of managers over workers.

Thus, other institutions besides the work place are called upon by the capitalist-dominated State to socialize workers into various work roles. We argue that capitalists and managers attempt to arrange that the skill development and socialization functions of these institutions correspond to the occupational roles which the people they are socializing will most likely have. We contend that with our model, the determination of these roles is largely based on the roles that the person's parents play (or played) in the job structure.

As we have argued, the organizational structure under which production is carried out changes over time--we have reviewed only the change from competitive firms to monopoly production, but other important changes took place before monopoly capitalism and have altered monopoly capitalism since, in the last seventy years. In our model, the sources of change in the organization of production inhere in the contradictions of production itself. These contradictions may initially only be latent, or may be temporarily mediated by other institutions of society, but eventually develop to a point where production can continue only if the structural forms under which it is carried out are radically changed (Carter, 1975). Contradictions can be exacerbated by political movements which arise to implement radical change (as in the U.S. beginning in the 1880s) or can be mediated by institutions such as schools which attempt to condition children and adults in ways which enable the system to continue reproducing itself. "When we speak of 'correspondence' between the schooling process and the work process, we are referring to the mechanisms and structures through which the schools mediate contradictions in the work process and thereby contribute to the reproduction of existing structures and social relations on the job." (Carter,

1975, p. 5)

The transition to another organization of production, such as that which occurred between 1890 to the 1920s, creates new contradictions which can also be mediated through institutions like schools by developing new values and attitudes which enable, for example, the division of workers prevalent in the monopoly sector to become expected by all workers and help the monopoly mode of production to grow at the expense of competitive firms and to reproduce itself at the expense of the working class as a whole. In societies in transition from one type of production system to another, including changes in capitalist production, Carter's proposition on correspondence must be somewhat altered: education can act to condition people to fit into the <u>new</u> system. Therefore, the schooling process intends to develop <u>new</u> attitudes and values to contribute to the development of a new system of production rather than to the reproduction of an existing system.

While correspondence to existing production structures is the raison d'etre of schools and therefore the primary organizing principle under which the schools operate, they frequently produce outcomes which are dysfunctional to the reproduction of existing or newly forming relations in production. Thus, correspondence not only arises out of contradiction but develops new contradictions.

There are two major reasons why correspondence of schooling processes to workplace requirements can turn into its opposite and create contradiction to workplace requirements. The primary reason is that organizing existing hierarchial structures of production and their associated property relations are inherently self-contradictory. They therefore require sets of attitudes, values and behaviors which are inconsistent (Carter 1975, pp. 6-7). Hierarchical structures require individuals to be competitive and to seek self advancement (at the expense of others); at the same time, most production requires cooperation between superiors and subordinates and between workers on the same project--the two requirements are contradictory. A second reason for non-correspondence is that the schools are not controlled by private enterprise. Once established as formally separate institutions staffed by individuals paid out of public funds, rather than directly out of profits, their bureaucracy acquires a certain life of its own, with objectives and a development process which may proceed independent of, and even, in some instances, in opposition to the needs of private enterprise.

In summary, correspondence between two sets of structures--in this case the production structure and the schools--is a major mechanism of mediating contradictions internal to the dominant set of structures. "Indeed, the mediation of contradictions within the dominant set of structures is often what calls the subordinate set of structures into being, and in all cases determines the basic form that these subordinate structures assume. Thus, a concrete understanding of correspondence is necessary in order to understand the subordinate set of structures, and an understanding of the incipient contradictions in the dominant set of structures is necessary to understand correspondence. However, precisely because the subordinate set of structures by assumption constitute a separate set of structures, they possess a relative autonomy from the dominant set of structures which permits them to develop in part according to an internal dynamic, to develop internal contradictions, and even to develop contradictions to the dominant structures" (Carter, 1975, p. 11).

II. OCCUPATIONAL SOCIALIZATION

The organization of capitalist society, the structure of labor markets in corporate capitalism, and the correspondence between social institutions and the production process form the bases in our model of understanding how people are socialized into work, particularly how schools function as institutions of socialization.

We develop our socialization argument in four phases: (1) We contend that the capitalist system of production generates a hierarchical structure which requires different worker attributes for the different levels in the hierarchy, and that these attributes are both noncognitive (i.e., behavioral) and cognitive. (2) We then show that important noncognitive attributes of different social classes are transmitted from generation to generation in part through the parents' work experience--through their own role in the production of hierarchy. We also contend that the family, while on the one hand acting to maintain children's class status unchanged through the transmission of attributes associated with certain level jobs, on the other often aspires for their children levels of schooling associated with higher level jobs than the parents hold.

(3) We hypothesize that school administrators and teachers have a fairly clear perception of where their students will ultimately end up in the job hierarchy, and consciously and unconsciously develop those noncognitive and cognitive traits in them which will best meet the needs of employers hiring them for those jobs. (4) We also hypothesize that political movements among youth and the general expansion of schooling are creating difficulties in the fit between jobs and the traits of young people entering those jobs, and that corporate capitalism is having to respond to the contradictions caused by this increasing lack of correspondence between the traits schools are producing and those required by the job structure.

Capitalist Objectives, Segmented Markets, and Worker Attributes

Capitalist production in our model, has three principal objectives:

1. Capitalists must secure adequate long-term profits, without which their enterprises would cease to exist.

2. As a class and as individuals, capitalists attempt to perpetuate the position of capitalists and allied high level management in the social relations to production.

3. Work roles must be organized so as to legitimate the authority relations in the firm. That is, relations among superiors, subordinates and peers must not violate the norms of the larger society, and the right of the superior to direct and the duty of the subordinate to submit must draw on general cultural values.

Bowles and Gintis contend that these general objectives of capitalist firms are translated into a set of criteria that employers use to promote, hire, and fire employees, and that these criteria can be represented by a set of five general worker characteristics: (a) cognitive attributes, such as scholastic achievement, plus concrete technical and operational skills; (b) a set of personality traits, such as motivation, perserverence, docility, dominance, flexibility, or tact, that enable the individual to operate effectively in the work role; (c) modes of self-presentation, such as speech, dress, and perceptions of social relationships, which "may be valuable to employers in their effort to stabilize, validate, and legitimize the particular structure of work roles in the organization as a whole;" (d) ascriptive characteristics such as race, sex, and age; (e) credentials, such as degrees achieved, etc. (Bowles and Gintis, 1975).

The presentation of this list of traits does not have to be derived from a class conflictual view of society. But in trying to predict which traits are more important in the production process, Bowles and Gintis argue that the most important aspect of the internal ordering of business enterprise is the social relation of capitalism--the retention of decision making power at the top and the organization of work roles so as to legitimate the authority relations in the firm--not technical or economic efficiency. Capitalists and managers are primarily interested, the conflict theory contends, not in maximizing production under any conditions, but only under those conditions where they can maintain a preferred position for the capitalist class (the owners of the means of production) and those allied with it.

With that model in mind, it appears that noncognitive attributes play a much more important role in determining success in capitalist firms than educators and social scientists studying education have been willing to admit. This does not mean that cognitive attributes are unimportant; indeed, we shall argue that families and schools impart different kinds of cognitive ability to young people much as they impart different behavior patterns, and that there is a relationship between the kind of cognitive knowledge imparted, the social class of the child, and the value of that cognitive knowledge in the world of work. Thus, we are not contending that cognitive knowledge plays an insignificant role in predicting economic success; rather, we suggest that the stress by most American social scientists on cognitive traits (particularly IQ) alone in predicting future success is misdirected. That emphasis avoids the crucial role of socialization in determining people's work roles.

There is some evidence to support the important role of noncognitive traits; Edwards (1974) found, for example, that supervisory ratings of employees were the best measure of job adequacy in his sample, and that these ratings are significantly correlated with personality traits of workers, but not with other worker attributes, which might reflect actual skills in doing their jobs, such as age (experience). Fuller (1970) found that worker promotion in two large electrical machinery producing plants in India was based on supervisor ratings which in turn had little to do with a worker's relative real productivity (his capabili-

ty in doing a certain job), but rather depended on the worker's formal educational level and the supervisor's personal relationship with the worker. Bowles and Gintis estimated that social class background, which they argue reflects an individual's noncognitive attributes, is much more important in explaining (statistically) adult economic success in the U.S. than IQ (a measure of cognitive ability) when years of schooling are accounted for (Bowles and Gintis, 1973). Again, the argument is that noncognitive attributes are a better predictor of how well a person does than cognitive attributes, given any level of schooling.

Perhaps the greatest difficulty with this argument and, indeed with the general use of IQ scores as a measure of cognitive ability, is that IQ only estimates a certain <u>type</u> of cognitive knowledge. We could argue, for example, that the "street sense" of inner city children is also a form of cognitive knowledge, but that it is not measured well by IQ tests. If we could devise a test of street sense, urban inner city poor kids would undoubtedly do much better than suburban middle class children. The <u>kind</u> of cognitive knowledge obtained by children in different social classes probably differs, and so Bowles and Gintis' argument that social class proxies noncognitive knowledge is only partially true. IQ picks up one kind of cognitive knowledge but there are other kinds of cognitive differences picked up by the social class variable. The point is that IQ is a form of cognitive knowledge which is allegedly valued in the employment market in some continuous way (no matter what kind of job a person holds, the more IQ he or she has, the better they will do in that job), but class-related cognitive knowledge may be job specific and thus its value depends on the value put by "society" on the job itself. For example, mechanical skills may be very useful in certain production jobs, but not very valuable for a corporate executive or a white collar supervisor. Yet is is professionals, white collar supervisors and corporate executives who are paid high salaries in the U.S., not production workers and mechanics.

We contend that based on the segmented structure of labor markets which developed under corporate capitalism, <u>particular</u> noncognitive and cognitive attributes of workers--those which fit the defined behavior and knowledge associated with different hierarchical roles in the firm--are demanded by

employers for different jobs. Further, while different levels of cognitive knowledge are demanded for different jobs, Bowles and Gintis' work indicates that the combination of class-related cognitive knowledge and behavioral patterns are better indicators of future economic position for those with the same level of schooling than the more universally tauted criterion of merit, IQ. Thus, even though IQ is a significant differentiator of workers in different jobs, it apparently is <u>not</u> as important as a person's personality traits, mode of behavior, and class-related cognitive knowledge. In other words, if we were to seek a <u>single</u> set of traits (other than the amount of schooling they had) to classify people in different kinds of jobs, that set would not be a person's IQ-type cognitive knowledge, even though IQ would be different between different groups.

The principal division between groups of workers is between those who are associated with the ownership of capital--the managers and employed and self-employed professions--and those who carry out the direct functions of production and supplying services. Managers and professionals generally control others (in fact, one of the principal functions of corporate bureaucracy, both public and private, is to control) or at least, themselves; thus they must, in order to carry out their work effectively, <u>identify with the corporate project</u>; in the private sector, this means increasing profits; in the public sector, it may mean other things as well, but one of the primary functions of the public project is to insure an overall high rate of profit for the private sector (O'Connor 1974). The production or service worker, on the other hand, is <u>controlled</u>. His or her life is structured and his tasks relatively well-defined. Rather than being self-directed like the manager or professional, the worker tends to value conformity (Kohn 1969). Edwards found that "... respect for rules was the most important at the lower occupation levels, dependability appearing strongly for the middle levels, and internalization of norms of the firm predicting best at the higher levels." (Edwards 1974.)

But in addition to the division of labor into occupational segments, labor market segmentation is complicated by sex and race differentiation and socialization. Although Kohn (1969) finds that race is not a particularly important <u>male</u> worker characteristic in understanding socialization once social class and job attributes (self-direction versus conformity) are accounted for, the fact

is that a high fraction of lower status and lower-paying (secondary) jobs are assigned to blacks; furthermore, there is evidence that in the private sector, blacks even in the primary subordinate, or semi-skilled to skilled jobs are treated pay-wise, very much like whites in the lowest-trained, lowest-paid jobs (Carnoy and Rumberger 1975). This means that black males are much more likely than whites to have jobs which require conformity. Indeed, in Edwards' terms, blacks are much more likely to have jobs in which respect for rules and minimal decision making takes place. Therefore, the issue of race and class in American society is inexorably mixed, and one of the easiest criteria by which to identify lower class workers in American society is by their race or ethnicity.

The role of women in the labor force is also important. Although most studies of socialization deal with father's occupation (for example, Kohn's and Mackenzie's, although Kohn does relate some of his variables to mother's occupation), women (mothers) are characteristically in occupations which require conformity, even if they have relatively high levels of education. As compared to white males, a significantly lower percentage of white females are in professional and managerial jobs, and of these, a high percentage are teachers. And those women in production and service jobs (such as clerks, secretaries, and saleswomen) are largely in dead end, repetitive jobs, requiring strict adherence to rules and prescribed forms of behavior. The fact that women have so little access to self-directed jobs has an important effect on the socialization of girls and of the effect of mothers' values on children's socialization; families from all classes have significantly lower educational and job aspirations for their girl children than for their boys (Mackenzie 1973).

The Effect of Various Inputs on Economic Success. Before going on to examine how parents, peers, and schools socialize youth into the world of work, we review the empirical estimates of the weight that each of these inputs carries in explaining individuals' economic success. This does not tell us the nature of each component of the socialization process, but if the correlation between son's social class, for example, and son's economic success is not statistically significant, then we would argue that the effect of family socialization on future work roles is not very important.

Sewell and Hauser (1974) compare the estimates of the relationship between social

class, mental ability (IQ) and economic success (occupational status and earnings), using the major sources of the 1960s data in the U.S. _/ In that comparison, they show the following:

1. In each sample, father's education and father's occupation have large and nearly equal effects on son's educational attainment. In the two nonfarm (Wisconsin and OCG) samples, the effects of father's education and occupation on son's occupation are large and about equal in size, while father's occupation is more important in the samples which include men with farm origins (see Sewell and Hauser 1974, pp. 82-86 for summary). In each sample, when son's educational attainment is taken into account, father's occupational status is more important in determining son's occupational status than is father's education. The effect is similar for income.

2. The relation of ability to SES is significant but not large--Sewell and Hauser (1974) claim, therefore, that IQ is generally not that dependent on SES. Ability mediates part of the effect on SES on son's occupational status through its influence on son's educational attainment. Part of the effect of educational attainment on son's occupation and income is thus due to ability. There is an important effect of ability on son's educational attainment in all samples as well, the effects on earnings of son's SES are almost entirely mediated by son's ability and by intervening educational and occupational achievement of the sons.

_/These sources include the "occupational changes in a generation" (OCG) national 1962 nonfarm sample used by Duncan, Featherman, and Duncan (1972) and by Jencks et al. (1972). In that survey total income is used rather than earnings. The second survey is the National Opinion Research Survey of 25-34 year old males taken in 1964. That survey was used by Duncan (1968) and Jencks et al. (1972). The third survey is the Parnes National Longitudinal Survey for males, black and white, age 18-24, taken initially in 1966. These males had at least one year of high school and were not enrolled in school in 1966, but used hourly wages as the income measure. The fourth survey was a Wisconsin survey of nonnegro, nonfarm males who finished high school in 1957 and were surveyed in 1964. This survey used social security-based earnings as the income measure. All the surveys used a Duncan scale for occupational status.

3. In the results using Wisconsin data, when father's income is entered as an independent variable (Sewell and Hauser 1974, p. 96), father's education and occupation are still significant explainers of son's occupation but not of son's income. Thus the key SES variable in the earnings equation is father's income. Only 16 percent of income is mediated by son's educational attainment or occupational status. Father's income has little effect on son's educational attainment. In the determination of occupational status, educational attainment has a very large direct effect, which is also directly influenced by father's occupational status and son's ability. In earnings, ability and educational attainment have modest and roughly equal effects, while the effects of occupational status and parental income each about twice the size of the effect of ability and educational attainment.

All this seems to indicate that a father's characteristics significantly affect a son's occupational status, both directly but primarily through their son's educational attainment. But the son's mental ability also affects occupational status through educational attainment. Son's earnings are influenced by father's income, ability, and the effect of educational attainment in addition to the direct effect of SES and ability. Even so, a much smaller fraction of the variation of earnings is explained by these variables than the variation of occupational status, largely because of their age: older workers' income seems to depend much more on SES, ability, and educational attainment than early career wages.

The results tell us that there is a definite effect of parents on a son's future work role, primarily through the amount of schooling that the son takes, but even directly once that schooling is accounted for. In the results shown--young people in the labor force are the focus of these analyses--the effect of parents is much greater on occupational status than earnings. Secondly, schooling also has a significant effect on work roles in addition to the influence of parents social status, and in addition to IQ-type ability (as we discussed above). Thus, something happens in school which influences work roles beyond universal-type measures of ability and beyond the parental effect: by taking more years of schooling, a person does better economically, taking account of his ability and parents' social status. This may be a certificate effect or may reflect

behavioral and knowledge increments which are not measured by IQ tests.

Unfortunately, the surveys did not measure the effects of peers on economic success; however, when we discuss peer influence, we shall discuss some of Sewell and Hauser's estimates of peer, parents' and teacher's on contribution to educational attainment.

Socialization in the Family. Kohn (1969) and Mackenzie (1973) show, in several different samples (Washington, D.C., national U.S., Turin, Italy, and Providence, R.I.), that parents' conceptions of which skills, values, or qualities it is important to instill in their offspring will be crucially influenced by their own experiences and situation in the adult world. "Insofar as middle and working class parents have occupied significantly different positions in social structure, they have practiced distinct modes of child rearing, which have, in turn, contributed to the maintenance of class differences and boundaries within complex society." (Mackenzie 1973, p. 51).

Both Kohn and Mackenzie find that white collar workers, particularly those in managerial positions appear more concerned with raising their children as individuals--with internalized values and standards of behavior, which make them self-confident and give them independence and integrity. In Mackenzie's sample he found that even craftsmen, the "aristocracy of labor," are more concerned that their children should learn to conform to externally imposed rules or standards, that they should be respectable while showing respect for others. Kohn found that middle class parents are more likely to emphasize children's self-direction and working-class parents to emphasize their conformity to external authority (Kohn 1969, p. 34).

Kohn argues that middle and working-class parents have these different values for children because of differences in occupational circumstances. In Kohn's terms, this "...does not necessarily assume that parents consciously train children to meet future occupational requirements; it may simply be that occupational experiences affect people's conceptions of the desirable." (Kohn 1969, p. 141.)

He finds that men who work under occupational conditions that facilitate the exercise of self-direction are likely to value self-direction for their children; men who work under occupational conditions that inhibit or preclude the exercise of self-direction

are likely to value conformity. He finds this to be true for both the middle and the working class. The class difference in fathers' values for children is largely attributable (statistically) to the experience of occupational self-direction. Even some substantial part of the class difference in mother's values is attributable to their husband's differential experiences of occupational self-direction (Kohn 1969, p. 151).

In terms of our model, this means that primary independent workers are likely to transfer a different set of values to their children than primary subordinate or secondary workers, and secondary workers probably impart an even more well-defined line of conformity and respect for rules and externally-determined direction than do primary subordinate workers. Thus the family acts, through the parents' work experience, to help reproduce the class structure by imparting values to their children which are useful largely in the same type of jobs which the parents hold.

Sennett and Cobb (1973) argue further that primary independent workers impart a greater feeling of pride in their occupational position than do lower status workers. The self-doubt and lack of self-pride in the lower status workers is transmitted to the worker's children and makes them want to get a higher status occupation than their parents, but nevertheless inculcated in them the sense that they are not as good as middle and higher class children:

> Still, the power of the educated to judge him and more generally, to rule, he does not dispute. He accepts as legitimate what he believes is undignified in itself, and in accepting the power of educated people, he feels more inadequate, vulnerable, and undignified. (Sennett and Cobb 1973, p. 78.)

Thus while parents are imparting these values to their children, and therefore reducing the possibility of their children's mobility to higher social classes, they also want their children to be upwardly mobile, and recognize the more obvious attributes that their children must have to move up (Mackenzie 1973, p. 57; Sennett and Cobb

1973./ Mackenzie's data suggest that differential orientations toward education are no longer found among blue and white collar workers. However, despite the high levels of educational aspiration only a small percentage (15%) of blue collar workers hope that their male children will study at the graduate level, while 45 percent of white collar parents and 55 percent of the managers have the same aspirations. For daughters, the difference is even greater: 2 percent for craft parents versus 20 and 36 percent (this also shows the uniformly lower educational aspirations for girls). Furthermore, Sewell and Hauser (1974, Table 2.4) show that the percentage of high school graduates who planned on college differs greatly by social class even within mental ability groupings Sprady and Charnov (197 , p. 12) show further that student's educational goals are more highly correlated with <u>perceived</u> parent's aspirations than parents actual goals, especially when it is assumed that parent's aspirations are a function of a student's performance in a school rather than a cause of it.

But more important than possibly difference among SES groups, levels of aspiration, the level of education <u>actually achieved</u> by children from these different class background differ greatly (Sewell and Hauser 1974, pp. 84-88). For both blue collar workers and clerks, the level is much lower than parents' aspirations (Mackenzie 1973, p. 69). Occupational aspirations for children also seem to fall short of actual occupations achieved in the case of crafts and clerk parents.

How does this process work? We have Mackenzie's evidence that the family has educational and occupational aspirations for its children that often do not correspond to the family's social class. Furthermore, the media communicate a massive amount of information to families on the attributes of those who are successful in America. Indeed, there is great emphasis in American society on those who became successful despite their humble backgrounds due to their motivation, intelligence, and perserverence. Yet, either lower class families do not take the time to socialize their children to occupations different than their own, are <u>unable</u>

/But Ronald Cohen (1975) argues that there is considerable evidence that certain ethnic groups, mainly from peasant backgrounds, value conformity to family and community norms over individualism and mobility: South Italians, Poles, Slavs, and others "have openly discouraged school achievement and prolonged attendance, at least through the second and into the third generation" (Cohen, 1975, p. 18).

to transmit these attributes to their children, or their partially successful efforts are mediated and transformed through the principal socialization institutions of the State (the schools) or by their children's peers, or both.

In our model, all these processes can be at work. We hypothesize that families generally may have very similar information on what the successful person is like (high level of schooling, style of dress, behavior pattern, etc.) but cannot translate this information into preparing the child to acquire those traits. The working class father, for example, cannot reproduce the living style and behavior of a manager's or professional's household, particularly the role model in which he serves. Working class parents probably realize that higher education is crucial to their children's future economic success, but have limited information and are constrained financially on the actions they have to take in order to promote their children's success in school (Mackenzie 1973, p. 71). For those working class parents whose children are average students in primary and secondary school, there are no options except to have the child continue in public schools; the finances are not there to shift to private instruction and specified tutoring. Furthermore, it is difficult for most families to send their children to private universities; thus only those low and middle income high school graduates who can qualify for scholarships have an opportunity to attend full time at a private university or the more expensive public universities. It is even unclear that many working class families would use savings for their children's higher education if they had them (Mackenzie 1973, p. 71).

The Influence of Peers. Authors like James Coleman, writing in the early sixties, argued that the socialization of teen-agers was primarily influenced by teenagers themselves.

> This setting apart of our children in schools--which take on ever more functions, ever more "extra-curricular activities"--for an ever longer period of training has a singular impact on the child of high school age. He is "cut off" from the rest of society, forced inward toward his own age group, made to carry out his whole social life with others his own age. With his fellows, he comes to constitute a small society, one that has most of its important interactions within itself, and maintains only a few threads of connection with the outside adult society. In our

> modern world of mass communication and rapid diffusion of ideas and knowledge, it is hard to realize that separate subcultures can exist right under the very noses of adults -- subcultures with languages all their own, with special symbols, and most importantly, with value systems that may differ from adults... As an intended consequence, society is confronted no longer with a set of individuals to be trained toward adulthood, but with distinct social systems, which offer a united front to the overtures made by adult society. (Coleman 1961, pp. 3-4.)

But Coleman introduces scanty data to back this generally persuasive argument. First, he shows that in a large Illinois sample almost 60 percent of teenagers were more concerned with adult approval/disapproval than with peer approval/disapproval. He interprets this to mean that the pull to peer group orientation is "extremely strong." Furthermore, he shows that only a small percentage of teen-age boys aspire to their father's occupation. But Mackenzie and others have made clear that a high percentage (60%) of even craftworker parents prefer a nonmanual occupation for their sons (Mackenzie 1973, p. 63), so the fact that 80-90 percent of teen-age boys preferring occupations other than their fathers' may mean as much as 70 percent agreement with their parents' occupational aspirations for them.

Sewell and Hauser (1974, Table 2.5) present some interesting data on this point: they show in their sample of Wisconsin nonfarm non-negro males graduating from high school in 1957, occupational aspirations had a .37 correlation with parents' SES, and had a higher correlation with the percent with parents' encouragement (0.51) than either the percent with teacher encouragement (0.41) or the percent with friends having college plans (0.46). The role of teachers is apparently the lowest as in Coleman's work, but parents' role is apparently the highest and friends second.

Besides the questionable nature of the core of Coleman's thesis, his presentation of the adolescent system of values and status does not shed much light on the relationship of peer group influence and the socialization into work. He concludes that "Modern adolescents are not content with a passive role" (Coleman 1961, p. 315). They attempt, in his opinion, through a

variety of activities outside the curriculum and the school to exhibit this discontent. It is the school, he contends, that makes the adolescent conform; left to his or her own devices and social structure, he or she would tend to be creative and self-directed. The Coleman theses, then, has the family and the school forcing a rebellious, creative, and individualistic adolescent to conform. Adolescent values and status structure, in this thesis, reinforce self-direction and creativity, a breaking away from the stultifying values of family and school, but at the same time separating the adolescent from the reality of the adult world to be faced after school.

There is probably truth to the idea that teen-agers rebel against their parents values and against the rules and regulation of the school which they are generally required to attend. Sennett and Cobb (1973) argue that real conflict takes place even in primary school for lower class children between gaining teacher's acceptance and acceptance by peers (see our discussion below). However, this is a far cry from the notion that adolescents are "not content with a passive role." For Coleman excludes the passivity of conforming to peer values and social rules. While they may prefer being accepted by their peers rather than their parents and teachers, conforming to peer group status rules is still conformity.

Friedenberg (1963) argues further that high school students choose as their ideal types hypothetical students who conform to society's definition of good leaders. Thus the adolescent does not--according to Friedenberg--set up his or her own social ideals, but rather generally adopts the values of adult society in choosing peer leaders. Similarly, numerous surveys show that teen-agers' political party affiliation and political attitudes are highly correlated with their parents' political preferences.

Thus it is not only questionable whether the teen-age social status system tends to produce a self-directed individual (who is ultimately forced to conform by parents and school), but whether teen-age socialization is all that different from parent and teacher socialization. Our model would argue that there are important differences from social class to social class in peer group expectations of educational attainment. We would argue that occupational aspirations also differ among peer groups from different social classes. All of these, we argue, reflect the

future job roles of the individual students involved, and thus produce aspirations and attitudes not all that different from socialization by parents and teachers.

Coleman is not very helpful on these points; although he differentiates among schools in his analysis, he is primarily interested in showing the characteristics of student elites and the adherence or not of such elites to parental approval/disapproval. Neither does Friedenberg deal specifically with different value systems among adolescent peers of different social classes. Yet we do know that when the working class, high school or junior college educated young come into the labor force, they have a different set of values and attitudes than those who finish college and enter managerial roles. Now if there is a universally creative teenage culture that is highly effective in socializing young people to be self-directed, they will function very poorly in jobs requiring conformity, and will have much more universal aspirations than possible to achieve in a hierarchically structured labor force. However, we do not find young people all wanting or expecting to be managers and professionals, and we find a high percentage of workers fairly satisfied with their externally directed jobs (Mackenzie 1973). Of course, there are also some workers (perhaps an increasing number) who have high aspirations--higher than warranted by their social class background--and are dissatisfied with their meniel jobs (O'Toole 1973; Terkel 1974). On the one hand, then, peer group values of self-direction (if such is the case) must be generally weak relative to parents' socialization and school reinforcement of that socialization, or peer groups do not differ that greatly from parents and school socialization into work, although peers, family, and school may compete on other grounds for teen-agers' allegiance. On the other hand, all three institutions--family, peers, and the school--may be sources of contradiction for the work system, the the sense that they do not socialize young people in ways that fit exactly into the needs of the stratified work system. Coleman's concern is that the peer group is the greatest culprit in "misleading youth"; but is unclear that this is so. While some youth may "see through" the basic injustices and illogic of the capitalist work structure, Coleman's view would imply that large numbers of youth have been able to avoid having their values shaped by the media and

consumption ideology in ways that make them into good workers in the job segment for which they are being prepared. It seems much more likely that contradictions internal to the production structure (lack of full employment, for example) or to the institution of schooling itself (such as the continued expansion of schooling to keep young people out of the labor market and to prepare them for ever more fractionated job classifications, for example) are responsible for the poor fit of young people's expectations and socialization to the jobs awaiting them (see Behn et al. 1975). We discuss this further below.

The Role of the Schools. In capitalist and post-capitalist societies, formal schooling seems to play an important role in determining what kind of jobs people will get and how much income they will earn (see, for example, Griliches and Mason, 1972; Sewell and Hauser, 1974; Duncan, Featherman, and Duncan, 1972; Chiswick and Mincer, 1972). Taking account of ability and social class differences, an additional year of schooling in the Sewell and Hauser Wisconsin sample of non-farm white male high school graduates results in 4 percent higher earnings seven years after high school; similarly, Kohen's work (1971) based on the Parnes' survey of U.S. 18-24 year olds (both whites and non-whites) shows about a 4 percent increase in hourly earnings for an additional year of schooling. Although this increase may seem small, the samples later in working life for people with more schooling are a good deal higher (Fagerlind, 1975). Even in Jencks' highly publicized results that the quantity of schooling taken by individuals in the U.S. explained very little of the variance in earnings (Jencks, 1972), he finds that an additional year of schooling increases income by about percent (Levin, 1974).

Schooling apparently plays a much more powerful role in explaining occupational status than earnings: in three separate studies, using different sets of U.S. data, educational attainment is the single most powerful variable explaining son's occupational status even when father's education and occupation and son's IQ are accounted for (Sewell and Hauser, 1974, summarizes the results of these studies in their tables 3.8, 3.9, and 3.10).

Therefore, who gets how much schooling is one key to understanding who does what. Although schooling

social class, and mental ability apparently account for only a small percentage of the variance of earnings of young people in the labor force, these variables are much more powerful in explaining incomes at higher ages, and are much more important in explaining a person's occupational status even when young. But what is it about schooling that makes it valuable to employers as a guide to hiring people for higher status jobs and to paying them more income? Do the schools increase people's mental ability or do they socialize children to behave in ways that make them "better" workers? Do the schools treat everyone equally? Do all schools emphasize the same values among their students? Do different levels of schooling give the same information, or treat young people the same? Do different schools at the same level provide the same cognitive knowledge? How do the values imparted by families, peers, and schools interact?

The view that schools are primarily a cognitive influence and that they represent the dominant instrument for cognitive socialization is refuted by a number of empirical studies. Virtually all the statistical studies attempting to determine the causes of achievement have concluded that most of the explainable variance in test scores is attributable to out-of-school influences rather than in-school ones (Coleman, 1966; Averch, 1972). While it is clear that children and young adults learn many skills and cognitive proficiencies in school, they also learn many of them out of school. Of course, the amount, but particularly the nature, of cognitive proficiencies and non-cognitive socialization that takes place both in and out of the school seems crucially related to the social class origins of the child.

Other studies attempt to determine what aspect of schooling is related to success in labor markets. That is, we know that educational attainment in terms of years of schooling on the one hand and earnings and occupational success on the other are closely related statistically. If the true effect of schooling on earnings and occupation were attributable to an IQ-type of cognitive effect of schooling (a continuous cognitive effect universally although not necessarily equally valued everywhere in the labor market), we would expect that the statistical relationship between years of schooling and work success would be attenuated or eliminated once we controlled for the cognitive (IQ) test scores of workers. That is, the

cognitive (IQ) theory of schooling's effect on such outcomes as earnings suggests that the reason that years of schooling have an important impact is because educational attainment is a surrogate for the kind of cognitive development measured by IQ test scores.

Attempts to explain the variance in earnings by both test scores and educational attainment indicate somewhat mixed results in this regard: several studies show that including test scores in the earnings equation only slightly diminishes the statistical effect of years of schooling (Gintis, 1971; Griliches and Mason, 1972; Bowles and Gintis, 1973). On the other hand, other studies show a high correlation between IQ score and educational attainment (Sewell and Hauser, 1974; Duncan, Featherman, 1972). However, those results are for younger workers. In any case, even when IQ is included in the earnings of occupational status equations in these latter studies, schooling is a more important variable than IQ and is a significant explainer of variation earnings and occupation in its own right. Accordingly, it appears that the effect of education on labor market success is through more than just the effect of IQ-type of cognitive abilities.

Based on the class conflict view of capitalist development, and the derived analysis of segmented labor markets, the correspondence principle leads us to a model of schooling's role in occupational socialization in which schools mediate contradiction in the structure of work by preparing children to accept the conditions associated with broad categories of work. Furthermore, as the work place itself changes through the process of contradictions inherent in capitalist development, schools are reformed to produce a new set of worker attributes corresponding to the new conditions in the production structure (Levin 1973).

In our model, the schools are not socializing to a set of competencies which are merely associated with a "modern society," nor are children and their families freely investing in those attributes which they think are most appropriate for the role which they choose to have in the work structure. The attributes associated with a modern society are developed in the interest of a

particular group of participants in that society--the owners of physical capital--who derive their economic and political power from the control of that capital and try to maximize the return to it. Since the structure of production which they attempt to control is constantly changing (although large changes in the structure of production may take many years), changes also take place in the type of attributes needed for production; indeed, in order to maintain control, capital owners change the structure of work and change the attributes they require for that work. Thus the nature of modern society is changed over time in non-linear fashion and the competencies required for various roles in the modern society is also changed in order to produce the maximum output efficiently, maintain control over decision making in the capitalist class, and to legitimate authority relations to the firm.

Neither is access to these competencies, in our model, equally available to all children going to school. As we discussed, children are socialized differentially in families from different occupational groups to have different noncognitive attributes and to expect to take different amounts of schooling and to enter different kinds of occupations (Mackenzie 1973; Kohn 1969), but this family socialization--<u>if it does not fit the needs of the production structure</u>--is usually mediated by by the school into the school's perception of what children's desires and expectations should be. We hypothesize that the school generally assigns the children those attributes which the administration of the school and its teachers feel are appropriate for the group in the school. According to our model, these attributes should correspond in some sense to the characteristics associated with different segments of the labor market. Thus children coming from working class backgrounds are much more likely to attend schools which attempt to develop certain expectations and attributes in their graduates, while children whose parents are managers and professionals are much more likely to attend schools which attempt to develop a different set of attributes and expectations in their graduates (for example, see Friedenberg 1963).

Meyer's concept of the "charter" of the school (Meyer 1973) is another way of describing the same phenomenon; a school has an implicit set of

objectives which are formed in accord with administrators' and teachers' interpretation of ideology as applied to the social class of the students attending the school. Thus those responsible for imparting knowledge and values in the school develop rules and regulations and curriculum which fits their view of what the children or young people in that school ought to be learning. Of course, in more centralized educational systems, like the French, the cognitive side of this learning process is more strictly controlled, but even in that system, noncognitive behavioral traits can be formed differentially from school to school based on differing rules and regulations and the attitudes of teachers. Furthermore, in the French system, much more emphasis on differential learning is placed on different levels of schooling, higher levels made more homogeneous through highly restrictive selection. In the United States, despite state efforts to homogenize curriculum, we hypothesize that there is wide variance in the cognitive information made available to students in different schools at the same level and the noncognitive values (conformity versus self-direction, for example) imparted to the students (on this last point see Friedenberg 1963).

We argue that differentiation takes place at several levels: First, we hypothesize that secondary schools provide one kind of cognitive information, while colleges and universities provide another. Secondary schools, generally teach language arts and social studies, for example, at a much lower and less critical level than do institutions of higher education. Primary schools, secondary schools, and colleges and universities also treat children differently. In primary schools, the custodial and behavior control function of the schools is central; adults act as surrogate parents. In secondary schools, although this varies greatly between schools (see below), the emphasis shifts somewhat to less control over the teen-agers behavior and increased time spent on cognitive learning. Finally, in colleges and universities (although again this varies greatly) the emphasis is almost entirely on the acquisition of skills. Thus those who finish university spend a greater percentage of their school years in a cognitive learning situation than those who do not. And college graduates will spend a greater portion of their school years

with access to critical thought and self-directed treatment.

As important, schools at each of these levels differ widely with respect to their emphasis on discipline and their academic curriculum (their "charter"). High schools in upper middle class areas put very little emphasis on student control; rather, they stress choices of courses, academic preparation for college, and student self-direction. On the other hand, inner-city school teachers and administrators are primarily into maintaining <u>order</u> and getting their enrolled students to attend the school (since their federal and state subsidies depend on such attendance). Cognitive learning plays a much more secondary role in the inter-city school, and the purpose of the school administrators is generally to comply with their "obligation" to give these teen-agers a secondary school education.

At the college level, the differentiation has become even greater than in secondary schools in recent years. As a higher and higher percentage of students go into post-secondary education, the "elite" and rather homogeneous nature of those institutions has gradually been transformed into a highly differentiated schooling system, with junior colleges--essentially high-level secondary schools --at one end of the spectrum and the private, still-elite universities and a few public prestige universities at the other. The curriculum in these different institutions is very different: compare, for example, the English courses taught at Harvard versus those taught in the California State university system; compare science (physics, chemistry, biology) in the Ivy League schools and at Boise State.

Getting into any post-secondary education, even four-year post-secondary, no longer means a "universal," critical education which prepares students for managerial or professional, self-directed jobs. Much of post-secondary education is now devoted to preparing people, curriculum-wise, for intermediate technical and clerical jobs. Since direct socialization of college students is not particularly oriented to social control, behavioral socialization takes place primarily through various courses. Channeling students to rely on external norms through control of cognitive information is clearly an important way of controlling who develops critical facili-

ties and who does not, but, as we shall argue below, may be a risky business: the existence of other sources of information in the society may create self-direction and critical facilities among many of these college students, even if there syllabi are well-controlled.

Besides the differentiation between levels of education, differentially accessible to different social classes, and the differentiation between different schools and institutions at the same level of schooling, again largely by the average social class of the students attending these schools and institutions. There is some evidence (Sexton 1961; Cohen 1971; Katz 1973; and Girling 1974) that schools differentiate between pupils <u>within</u> the school as well. The argument of within classroom differentiation is based largely on differential teacher treatment of different racial, ethnic, class, and sex groups. Teachers reward some pupils more than others, it is argued: those pupils who are more aggressive, more self-directed, and have characteristics, such as whiteness or maleness, which teachers expect of better pupils will receive more positive signals from the teachers. Therefore, it is possible that even within schools with charters which would channel pupils into particular direction and thus socialize them to play particular roles in the job structure that especially bright and highly motivated pupils will do well academically and will go on to prestige universities, to graduate school, and move out of their social class.

Sennett and Cobb (1973) describe the process in this way:

> What happens is that the teachers act on their expectations of the children in such a way as to <u>make</u> the expectations become reality. Here is how the process worked in one second-grade class at Watson School--unusual because it was taught by a young man. In this class there were two children, Fred and Vincent, whose appearance was somewhat different from that of the others: their clothes were no fancier than the other children's, but they were pressed and seemed better kept; in a class of mostly dark Italian children, these were the fairest skinned. From the outset the teacher singled them out these two children, implying that they most closely approached his own standards for class-

> room performance. To them he spoke with a special warmth in his voice. He never praised them openly by comparison to the other children, but a message that they were different, were better was spontaneously conveyed. As the observer watched the children play and work over the course of the school year, he noticed these two boys becoming more serious, more solemn, as the months passed. Obedient and never unruly from the first, by the end of the year they were left alone by the other children.
>
> By then they were also doing the best work in the class. (Sennett and Cobb, 1973, p. 81.)

But most working class youth are channelled into tracks which make it difficult for them to reach higher levels of schooling. The tracking system was developed around World War I, just at the time that high school education expanded to allow increasing number of working class youth to attend. Now children are tested continuously even in primary school and tracking into "high" and "low" math and language arts classes occurs in these early grades. By the time a working class child reaches junior and senior high school, he or she has usually been classified in a "low" category and is taking a curriculum designed for those who will not achieve managerial or professional occupations; in most cases, we hypothesize, the working class student is being prepared, through tracking, for at best a low-level white collar career.

Tracking works because the pupil's test scores can be used to convince parents and pupil that the pupil should be in a low track. This is part of the role that schools play to shift the blame for failure onto the pupil and his family. According to Sennett and Cobb (1973), the working class pupil is caught in a dilemma: on the one hand, the child can win respect from the figure in power--the teacher--alienating the child's peers, but confirming to the teacher-authority figure that he--the pupil--is someone who wants to make it in life. On the other hand, the pupil can win respect from his peers, but he will then feel that he has not earned the respect of a power person in a higher social class (the teacher). The resolution of this dilemma is placed squarely on the shoulders of the pupil; the teacher is presented as a passive actor in the drama, and the system which places this decision on the pupil is ratified

not only by other pupils, but the child's parents, who see the teacher as the gatekeeper to opportunities the parents never had.

> Since the teacher appears to him as passive, is it not his own fault if he fails to catch the teacher's attention? The system must work, for the child can see that a few are chosen--but not he. Could he have paid more attention, worked harder? He wants and needs friends; since he cannot read the teacher's mind, how can he know that forming friendships based on "hanging around," mutual defense, and breaking small rules, reinforces the teacher's belief that he hasn't much intellectual ability? (Sennett and Cobb, 1973, p. 88.)

While the same conflicts occur for higher class children, the level of expectations by both parents and teachers is higher. Often, in the case of children with higher class parents, the poorly performing pupil is still channeled into the academic track because he is <u>expected</u> to be there. More important, in schools which have higher primarily middle class children as their clientele, even the lower track is one designed for junior college termination. The tracking system is therefore utilized differentially for pupils of different social classes even though tracks may exist in all secondary schools.

In addition to test scores for tracking, the guidance counselor plays an important role in "convincing" and "guiding" pupils into the "proper" courses suited to their academic performance and career objectives. We suspect that there is usually not much conflict between the counselor and the students; youth who have been conditioned to respect external authority at home probably accept the counselor's advice as fair and correct. Besides, the school can usually back their advice with test scores and grades. However, some students perceive their objectives very differently from the counselor's; they may see themselves as four-year college material, for example, while he has them into a program which terminates with junior college. In these conflicts, the counselor has a great deal of power; he can prevent or at least make it very difficult for a student to take particular key courses necessary for four-year college entrance; he can withhold information on which courses to take,

or on the need to sign up for the SAT's, or he can brand the student a "troublemaker" and make him or her unpopular with the teachers. At the junior college level, the role of the counselor has become crucial in "cooling out" these ambitious students between high school and four year colleges (Clark 1965; Karabel 1972).

In that sense, the schools provide the means for mobility. But despite the possibility of social mobility, the probability of attaining the attributes (both cognitive and behavioral) associated with managerial and professional jobs is much less for some children than for others. We have argued that the schools achieve this differential socialization by their differentiation into levels with different objectives and treatment of students attending those levels, by differences in the charter of schools at the same level--for example, high schools with primarily pupils from managerial and professional families socialize their students by rules and regulations which count much more on the self-directedness of the students than in schools which cater primarily to working class students, whose rules, regulations, and administration keep students in check by much more direct means (Friedenberg 1963).

Finally, a single school will differentiate among pupils. Although this differentiation is in theory supposed to be based on academic performance only, in practice, we hypothesize, pupils from higher social classes are "expected" to be college-bound and to follow academic curriculum. They are, furthermore, encouraged by counselors and teachers to take admission tests to colleges and to apply to the better universities. This tracking and counselling corresponds to pressures and interaction with parents who expect their children to follow this route to match their socialization and parents' aspirations. On the other hand, we hypothesize that working class youth are much more likely to be tracked into the nonacademic courses if they are average students, even if they are in a secondary school attended by various social classes. The point is that working class parents do not evoke the same response from the school personnel to their <u>average-performance</u> child as parents who work in primary independent jobs. Of course, if the working class pupil is way above average, the school may point him toward higher

academic levels, if the school is geared up to give him the preparation to get into the better universities, if the teachers are inspired enough to encourage such pupils, and if the pupil is not socialized by his peers and parents to go into another direction, for financial reasons if no other.

In our discussion, we have not argued that higher social class children are on average, academically brighter and thus tend to go further in school, becoming socialized in those higher levels of schooling to be self-directed, and therefore matching their schooling socialization with their socialization at home and among their friends. Although this statement is probably true, it is not necessary for our model. We argue that the average IQ higher social class child is not only socialized at home to be more self-directed and to aspire to occupations which require more self-direction (and thus to aspire to more schooling), but that the school system also expects average performance higher class pupils to go further in school and to fill the self-directed occupational roles, and acts on that expectation to provide the curriculum, socialization, information, and encouragement to average higher class pupils so that they can achieve those roles. Working class average performance pupils, on the other hand, are expected by the school system to fill occupational roles which require conformity and less schooling (although <u>bright</u> working class students may be encouraged to go on--see Kohl 1953 cited in Friedenberg 1963, p. 288, and Sennett and Cobb, 1973). The school provides these students with the curriculum, rules and regulations, and counselling which prepares them for the conforming roles. Even if the working class parents of such a student have aspirations for high levels of schooling and a managerial or professional occupation, they have to face the conflicting opinion of a school which has already prepared the arguments why their child is "better off" following the prescribed course. Financial constraints preclude attending a private school for working class youth if the parents are dissatisfied with the school's advice, obviously a course open to wealthier parents.

Therefore, we argue that students with the <u>same</u> IQ from different social classes face very different conditions in the school system. They tend to be socialized to different occupational roles by the school, even if the educational and occupational

aspirations of the parents for their children are the same. As we have shown, however, children from different social classes are also socialized by their parents and peers into different social roles, roles which correspond to their own place (or, in the case of peers, into their prospective place) in the segmented labor market and receive the kind of cognitive knowledge that corresponds to that place as well. The schools usually do no more than reinforce the socialization process that goes on in the home and in the street. But if there is a conflict between socialization (including aspirations) in other institutions and the role prescribed by the school, the school uses its powers of persuasion (counselling), enforcement (if you do not have certain grades, you cannot take college-bound courses (except by permission)), and certification (teachers can give low grades to pupils they don't approve of--troublemakers) to convince the pupil and his parents that it is right.

III. SOURCES OF CHANGE AND CONTRADICTION

In our model, the school changes to meet new conditions in the labor market and to mediate contradiction originating both in the production structure and the superstructure (schools, family) itself. The mechanism by which schools change is probably a combination of direct intervention through business-dominated school boards (see Tyack 1974, for a history of the influence of businessmen on big city school boards) and the indirect effect of new perceptions of different classes' labor roles by school administrators, teachers, and parents. Furthermore, the State and influential capitalist foundations use academics to legitimize the possibility of certain reforms in the public's and teachers' eyes. Good recent examples of this have been the Coleman report (1966), the Carnegie Commission on Higher Education (1973), the President's Commission on Youth (1973). But the exploration of this mechanism is beyond the scope of our study; rather, we concentrate on the process of change in socialization over time and how it responds to contradictions.

The labor market changes over time. Even in as short a period as the decade 1960 to 1970, the percentage of menial minimal training secondary jobs in the labor market has declined significantly (Carnoy and Rumberger 1975). Over a longer time period, the most important changes in the

U.S. labor force have been the growth of white collar jobs, the proletarianization of such jobs (Braverman 1974), the tremendous increase of women in the labor force (25 to 38 percent of the labor force between 1940 and 1970), and the rapidly increasing share of the labor force employed by the public sector (8 to 16 percent between 1940 and 1970).

As the labor market changes, the job role of different social classes also changes. With the expansion of the monopoly corporations, the number of white collar jobs associated with the management of the corporation (including sales and promotion) also expanded. This allowed for some working class children and the children of self-employed (the percentage of self-employed in the labor force declined from 22 percent to less than 8 percent between 1940 and 1970) to move into these nonmanual occupations, and in some cases, into nonmanual occupations which required traits of self-direction. The professional classes also expanded greatly, as well as the number of teachers, and the State bureaucracy. All this required many more people with attributes of nonconformity and internalized norms.

For the most part, we argue, this changing requirement of the labor market was not adjusted to first by changing the nature of schools at each level. Rather, youth tended to stay in school longer and thus attended higher educational institutions whose organization and objectives were different from those in secondary and primary schools. However, as more and more students continued on to post-secondary education, the nature of both post-secondary and secondary education also began to change. Gradually, and especially in recent years, secondary schools ceased to be a place of selection in which some students were prepared to go on to university, some to finish high school and some not to finish. Now only a small percentage of students does not finish secondary education--indeed, high school graduation is almost universal, and the secondary school is becoming very much like primary school (K-8) was a generation ago; automatic promotion and a universally completed level. With the change in the nature of the labor force through the growth of large corporations and the public sector, secondary education for working class youth--even black or brown working class youth--has evolved

into a holding institution essentially required to finish up all but the retarded, some of whom will then be sent to special trade schools in order to prepare them for semi-skilled tasks.

College has also changed, as we have contended above. An increasing percentage of college and university students are being prepared for proletarian jobs, white collar technicians and clerks who must have a college education to qualify but who are in tasks requiring responsiveness to external directions and a respect for authority. In fact, the junior colleges prepare many students for skilled production line jobs and no more. Under these conditions, we would expect the junior college and state universities to exhibit increasing control over students' curriculum, and to stress conformity to externally imposed rules and regulations even more than they do currently.

The tendency to meet the changing needs of the labor force through increasing the length of time that students stay in school rather than changing the function of each level of schooling first has, we believe, created some sources of contradiction within the schooling sector itself; increasing the amount of time that young people stay in school tends to develop occupational expectations derived primarily from past notions of what kind of jobs people with higher levels of education are supposed to get. Of course, in the changing labor market, very few college graduates --or better, graduates from very few of the colleges and universitites -- get the kinds of jobs they expected, even though they may have avoided the manual occupations of their parents (Mackenzie 1973). Furthermore, we hypothesize that post-secondary education has not generally adjusted its socialization function to fit the type of work its graduates are now getting. We contend that colleges, on the average, still believe that they should develop a student's self-direction, but a self-directed clerk is not a happy clerk, so the contradiction; the schools are, at least in part, not fitting socialized labor into the work structure, leaving an increasing portion of this task to the employer (Coleman et al. 1973).

Perhaps an even more important source of contradiction is the effect of peer group influence. The most recent Coleman report (Coleman et al. 1973) re-

fers to the negative effect of youth culture on the traditional value of work and the lack of socialization into work by the schools. Although Coleman, et al. accuse the schools of failing to socialize youth into work, it is the increasing period of time which youth spends with each other rather than in the "real world of work" which comes in for the greatest criticism. Apparently, all the time youth spends in its own world results in the development of values particular to youth and antithetical to good work habits (see Behn et al. 1974) for a more detailed analysis of Coleman's findings. Although we do not agree with Coleman's view of the situation, he has pinpointed a possibly important source of contradiction in the expanded period of time designated for young people to be trained for the changing labor market. Indeed, the schools may not be socializing young people into the new world of work since young people are attending schools longer and expecting more from the workplace. Meanwhile, while the names of the jobs may change, and their function as well, the kinds of attitudes and values necessary to perform them to the needs of the employer have not changed at all. Primary subordinate jobs, whether they be on the production line or nonmanuel, still require the unquestioning following of orders and the responsiveness and respect for external authority.

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In the present ferment of educational debate in America the critics of the public school system are legion. But those now sharing in the mounting chorus of discontent do not always know their bedfellows. This essay analyzes one strongly emerging and coherent anti-public school group in order better to illuminate the scene for all. Clearly socialist in philosophy, the group's members are employing a strong blend of Neo-Marxian ideology and criticism. I shall examine the important separate parts of the group's doctrinal "mosaic" as follows: Part I will critically, but briefly, analyze the attempt by the two important leaders of the group, Samuel Bowles and Herbert Gintis, to provide a basic scientific core. In particular I shall focus upon their alleged statistical "proof" of capitalist class dominance and capitalist manipulation of the public schools. Part II will critically scrutinize the group's general diagnosis of failure in society as a whole, a failure of which the public school problem is only one symptom. The article will here demonstrate four fundamental errors in their central reasoning, errors that are especially relevant to the public school argument in particular. Part III will conclude with a study of the group's socialist "cure" of strategic infiltration of the correct (radical) philosophy into the public school system, a system that will not be abolished, returned to, or dissolved for the people, until the new leaders have employed it themselves to "hasten," or facilitate, the (inevitable) dialectic of true social revolution.

PART I

The Public School System as a Prop to the Capitalist Class Structure: The Scientific Testimony

One of the group's most prestigious, and influential analytical pieces is that of Samuel Bowles and Herbert Gintis (1973) on I. Q. philosophy and its role in the class structure. This work has now been incorporated by the authors into their (1976) book. The initial purpose of both works has been to question the undisputed assumption on both sides of the recently revised I. Q. controversy, the assumption that I. Q. is of basic importance to economic success. The authors conclude from their statistics that it is social class, as determined in the capitalist system, that is the true basis for economic success: and that the emphasis on intelligence serves only to legitimize an authoritarian, hierarchical, stratified, and unequal economic

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system of production, and to reconcile the individual to his or her objective position within it. "Legitimation is enhanced merely when people <u>believe</u> in the intrinsic importance of I. Q." [Bowles and Gintis (1973) all further references are to this article.]

Consider the relationship between economic success and I. Q. The authors certainly concede a positive simple correlation coefficient between the two variables. An individual whose adult I. Q. lies in the top 10 percent of the population has a probability of 30.9 percent of ending up in the top 10th of the population in economic success, and a probability of 0.6 percent of ending up in the bottom 10 percent. They proceed to show however even stronger associations (a) between years of schooling and economic success, and (b) between social background and economic success. Consequently we have to choose between theories of social stratification, the I. Q. theory, the educational attainment theory, and the socio-economic theory. Using linear regression analysis, numerical estimates are next obtained of the <u>independent</u> contribution of each of the separate (but admittedly correlated) influences of social class, I. Q., years of schooling to economic success. Answers are found to the question what are the probabilities of obtaining particular levels in economic success among individuals who are at the same level in some or all of the above influences but one, and in changing this one variable alone [p. 72]. They then show that the association between I. Q. and economic success is largely a by-product of social background and schooling rather than the converse. The authors are thus led to focus directly on the role of social class background and schooling in promoting economic success.

Consider next the common proposition that economic success depends on cognitive (intelligence) capacities, and that schooling "both selects individuals with high intellectual ability for further training and then develops this ability into concrete adult cognitive skills." [p. 72] Very relevant to this argument, Bowles and Gintis insist, is their finding that individuals with similar levels of adult I. Q. but differing levels of schooling have substantially different chances of economic success. Schooling affects chances of economic success, they conclude, predominantly by the non-cognitive traits which it generates. An instance of this is the degree to which personality characteristics reveal the acceptance of discipline, obedience and high motivation for work. The relationship between social background and economic success moreover is largely independent of individual differences in I. Q. according to Bowles and Gintis. According to their estimates, persons of equal childhood I. Q. in the top ten percent of social class background have a 27.7 percent probability of reaching

the top decile of economic success whereas persons in the lowest decile of social class (but with equal I. Q.) have only a 1.1 percent chance of reaching the top of the economic ladder. In other words even if all class differences in I. Q. were eliminated, a similar pattern of class intergenerational immobility would result. This is claimed to support the authors' proposition that the intergenerational transmission of social and economic status operates primarily via noncognitive personality mechanisms. Evidence is finally produced to show that the relationship between class and economic success operates almost entirely independently of differences in I. Q. If all class differences in I. Q. were eliminated a similar pattern of class intergenerational immobility would result. This again supports the conclusion that the intergenerational transmission of class position and economic status operates primarily through noncognitive (personality) mechanisms, despite the fact that the school system rewards higher I. Q.

My first comment on this analysis is to repeat the observation of Gary Becker (1972) that economists find the term "class" not very helpful. Instead we should focus on individual or family behavior for analytical purposes. Second, even if we ignore this objection the Bowles/Gintis data are not sufficient to enable us to determine the more reliable indicator of economic success, namely lifetime income. Their 1973 data refers to "non-negro" males aged 25 to 34, from non-farm background in the experienced labor force. Yet the income of professionals, the group that contains the most highly educated, and those with the highest I. Q.'s, is likely to be still quite modest at the age of 34; and especially those professionals whose parents had low incomes; whereas a distinct relative gain in income over non-professional groups appears and increases considerably in the next 10 to 20 years. Only measures of lifetime income can overcome such problems.

My third criticism is of the claim that for a given level of social background and schooling, differences in adult I. Q. add very little to our ability to predict eventual economic success. [Bowles and Gintis (1973), p. 72] There is room for considerable debate as to the definition of very little in the figures provided by Bowles and Gintis. These show that a member of the top decile in I. Q. has a 14.1 percent of attaining the highest economic success decile, whereas a member of the lowest I. Q. decile has a probability of only 6.6 percent of reaching the top ten percent of economic success rating. Clearly this does show positive correlation between I. Q. and economic success. It is a matter of opinion whether it is, as the authors claim, only a negligible relationship.

Fourth, Bowles and Gintis do not cite the new literature on the use of education as a screening device by employers

to minimize hiring costs. Neither do they mention that frequent use of the I. Q.-like examinations is made in the Socialist countries, and these serve as even more restrictive screening devices than education and testing serve in countries with more competitive political systems.

Further criticism will first require a fuller development of their theme. They proceed to ask why, if I. Q. is not an important explanation of economic success, it yet plays an important role in the "stratification system" of capitalism. Their verdict is that the true function of I. Q. is that of "legitimating" the stratified capitalist system. But their limited statistical work surely groans under the weight of such heavy and ambitious explanation. I shall argue that, even if one shares their statistical reasoning, theirs is not the only possible hypothesis to explain the "problem." The "stratification system under capitalism," is described by the authors as stemming from:

> the hierarchical division of labor characterized by power and control emanating from the top downward through a finely graduated bureaucratic order. The distribution of economic reward and social privilege in the United States is an expression of the hierarchical division of labor within the enterprise. [p. 74][1]

The capitalist system is alleged to be "totalitarian" in the sense of justifying its social relations by a subtle and ubiquitous control through indoctrination of the family, interpersonal relations, law, and politics. To cover up the contradiction between the ideals of equality and democracy in the political sphere, capitalists require plausible legitimation in order to reconcile people to their particular station in life. ". . . employers and other social elites have sought to use the schools for the legitimation of inequality through an ostensibly meritocratic and rational mechanism for allocating individuals to economic positions." [p. 101] Such legitimation is found in the emphasis on the unavoidable technical necessity of the division of labor. Apologists argue that because the division of labor features all kinds of social systems from those in the United States to those in the Soviet Union it is not a capitalist institution but a universal one. But this justification of the division of labor "leads smoothly to a meritocratic view of the process of matching individuals to jobs. An efficient and impersonal bureaucracy assesses the individual purely in terms of his or her expected contribution to production." [p. 75] Everybody comes to accept that

[1] See also Bowles and Gintis (1976), p. 83.

the just way of allocating job roles is through their relative possession of cognitive and psycho-motor capacities relevant to the job. It is in this way that I. Q. comes to be accepted as the socially appropriate screening mechanism for an unavoidably specialized technocratic society. This acceptance prevails, Bowles and Gintis argue, despite the extensive evidence that I. Q. is not an important determinant of individual occupational achievement and that few occupations place cognitive requirements on job entry.

Next, although workers are vaguely aware that in practice economic success is not an inevitable accompaniment of intellectual achievement, the fact that they continue to accept the idea can be explained by their preindoctrination in schools that foster "I. Q.-ism" and thereby legitimate the hierarchical division of labor. Success in school is measured primarily by cognitive achievement and this is regarded as fair. Schools meanwhile are geared to the production of cognitive skills. Since the evidence shows a strong relationship between economic success and the length of schooling, the importance or relevance of cognitive skills or I. Q. to economic success is superficially seen to be equally inevitable.

> By the time most students terminate schooling they have validated for themselves their inability or unwillingness to be a success at the next highest level. Through competition, success, and defeat in the classroom, the individual is reconciled to his or her social position. [p. 78]
>
> Education reproduces inequality by justifying privilege and attributing poverty to personal failure. [p. 114]

Bowles and Gintis argue that when employers take on workers they look for qualities that are much more important than cognitive abilities. They focus on personality traits such as motivation, perserverance, docility, dominance and so on that enables the individual to fit into his work role. In addition the authors point to "modes of self-presentation" which include patterns of peer identification and perceived "social distance" from individuals and groups of different social position. Educational credentials, meanwhile, showing the level and prestige of education, help the employer to further legitimize the organization according to prevailing social values.

Finally consider the true objective of capitalists. It is to perpetuate their class standing and to make profits. Profits are pursued both as an instrument in maintaining the class status of the directors of the firm, and as their major source of income. The maintenance of class status calls for the regimentation of the lower class members into work roles; but the resulting dominance enables profits from exploitation. In

the total pattern there is a close correspondence between social and hierarchical position in the family, in the school or university, and in the work place. Those at the bottom of the hierarchy need emphasis on obedience and rules whilst discretionary scope is enjoyed at the top. Correspondingly, college students have a wider range of choice over curriculum than do high school students. Similarly there is a "pecking order" of social relations from the elite four year college at the top downwards through junior college to a working class high school. The school administrators in the working class schools adopt a type of social relations that closely reflects that of the factory. The classes of low income children are large because of financial stringency, and choice of curriculum is small. A high premium is placed on obedience and punctuality with few opportunities for independence and creative work. Having come through this lower sort of public school, working class parents have been indoctrinated to favor more authoritarian educational methods for their own children. (Bowles and Gintis do not seem aware of the recent experiments with gradeless classes and wide choice of curriculum in high schools.) The family itself therefore acts to perpetuate inequality and does the capitalist's job for him.

Bowles and Gintis lead up to a diagnosis of what they call contradictions in the capitalist system. First, because this system has succeeded in its ability to "deliver the goods" to such a degree that workers can now afford to look for the satisfaction of other needs. One of these is that of self-fulfillment at the work place, a need that the advanced capitalist system is not geared to satisfy. Capitalism attempts to fight back by renewing its efforts to strengthen the meritocracy, the I. Q. philosophy, and the system of educational credentializing. Second, an increasing proportion of white collar workers are being herded into the proletariat class so that the number of defenders of capitalism is rapidly shrinking. Third, participatory control by workers is being shown to be a more productive form of work organization and is challenging the traditional system. Fourth, the international expansion of capital has instigated new opposition in underdeveloped countries where capitalism is on the retreat. Finally, because the large corporation and state bureaucracies have replaced entrepreneurial elite, white-collar, and independent professional jobs as the center of middle class economic activity, the consequent polarization of society has provided the impetus for the emergence of radical movements. On this final note of the possibility of powerful social movements dedicated to the elimination of hierarchical division of labor the authors conclude their 1973 and 1976 works with the hope that their arguments will contribute to this very outcome.

PART II

Social Collapse in General

Clearly the radical writers see the coming public school 'breakdown' as one among many symptoms of a society that is in collapse generally. This collapse, in turn, is linked to the impending resistance to the continued polarization of solid groups within it, and to the new awakening of hitherto robot workers, robot consumers, and robot students. In order to challenge the errors in the radical analysis and prophecy of school failure, one has obviously to probe for companion errors in their total (solid) institutional diagnosis. This is a large task for one article, and one that has public schools as its main subject. But some argument, however brief, on the wider aspects of radical doctrine is essential at this point. I can assure the reader that what comes next is still very relevant, if indirectly, to the school question, and that, in any case, I shall return fairly quickly to issues in the debate that are more obvious or direct relevance.

The first error in the radical diagnosis of social breakdown is the argument that the emergence of state bureaucracies is the product of capitalist evolution. This is not so. Such bureaucracies stem from the development of government responsibility for "public" goods in political democracy; and Bowles and Gintis urge more "democracy" than anything else. Second, there is error in their argument that there is a conflict between the rising aspirations of workers to demand control over decision-making and working conditions and the reactionary capitalist's defensive strategem of dividing workers among different job levels to weaken their solidarity. This conflict, Bowles and Gintis tell us, will be resolved increasingly in favor of the workers with the passage of historical time because worker control systems are the most efficient. But the "free market" system, in permitting full competition in the quest for profits, has for years allowed the fullest variety of contractual arrangements. So if participatory control by workers is more productive why hasn't it emerged and survived as the new most profitable enterprise already? If capitalism has "delivered the goods," and has created affluence at all social levels, the scarcity of capital can no longer be argued as an obstacle to the triumphant emergence of such labor oriented firms. Trade unions now invest vast sums in ordinary shares; there is no reason why they cannot divert them to their own respective enterprises. In other words there seems no need to wait for, or to dwell in terms of, an ideological or political revolution to justify such development; because it is not obvious that the present market system could not cope with, and accommodate, this very change quicker than any other.

The third error in the radical's analysis of general breakdown concerns their so-called hierarchical division

of labor. This is best represented in a remarkable article (much quoted by Bowles and Gintis (1976) by Stephen Marglin (1974). At the beginning of it Marglin asks:

> . . . why, in the course of capitalist development, the actual producer lost control of production. What circumstances gave rise to the boss-worker pyramid that characterizes capitalist production? And what social function does the capitalist hierarchy serve? [p. 61]

Marglin's answer has to do with the emergent capitalist forcing himself between the worker and the consumer as an intermediary to integrate the worker's labor with the labor of others and supply the new system with scarce capital. Forced by competition in the subsequent relentless battle with the capitalists, each participant (adversary) has to adopt increasing divisions of labor. Yet, Marglin argues, the productive advantages of the division of labor can be obtained without having to experience it under one roof under the personal control and supervision of a capitalist. The separation of tasks is not necessarily connected with the factory organization. Yet the capitalist forced this system on to society and maintained his hegemony with the development of the practice of paying advances against future labor. "Wage advances were to the capitalist what free samples of heroin are to the pusher; a means of creating dependence." [p. 79]

The main explanation of the factories is the exploitative power that capitalists enjoyed after they had established them. Recruiting the first generation of factory workers was the key historical problem. Once this was accomplished the rest of the capitalist apparatus became developed and entrenched. Marglin's thesis not only complements the social stratification theory of Bowles and Gintis, and what is more directly relevant is that it contains similar educational implications: "Once grown to maturity, fortified by the discipline of the church and school, the next generation could be recruited to the factory with probably no greater difficulty than the sons of colliers are recruited to the mines or the sons of career soldiers to the army." [p. 100]

Yet miner's sons (see the last quotation) do not usually go down the mines. Most Americans, moreover, possess considerable capital during their lifetimes, and typically do not regard themselves as "working class." More important, there is a conspicuous failure in Marglin, Bowles and Gintis to make full reference to other modern attempts at scientific explanation of the origin of the firm. The most serious omission is the absence of any reference to individual choice, choice enjoyed by consumers between products, and choice enjoyed by workers between firms. The

"pyramidal" control structures in the enterprise system emphasized by the socialist writers need to be complemented by two important inverted "pyramids." One of these represents consumers at the top and the entrepreneurs at the bottom. Consumers can exercise free choice and thus have considerable control or command over the suppliers.

The most interesting modern hypothesis that presents a totally different interpretation to that of Marglin and his colleagues is that of Alchian and Demsetz (1972). It is a delusion, they argue, to characterize the firm by the power to settle issues by fiat, by authority, or by disciplinary actions superior to that available in the conventional market [p. 777]. The employer can only fire or sue, just as a consumer can fire his grocer by stopping purchases from him or suing him for delivering faulty products. The single consumer has the same kind of power of assignment as does the employer. He can assign his grocer to obtain whatever he can induce the grocer to provide at a commonly acceptable price.

> That is precisely all that an employer can do to an employee. To speak of managing, directing, or assigning workers to various tasks is a deceptive way of noting that the employer continually is involved in renegotiation of contract on terms that must be acceptable to both parties. [p. 777]

Thus, according to Alchian and Demsetz, the only difference between the relationship between the grocer and his employee and that between a grocer and his customer is more of a descriptive characteristic than a fundamental one.

Alchian and Demsetz proceed to argue that the employer-employee relationships involve a team process and this induces the contractual form called "the firm" because of what they call the "metering problem." With team production there is a difficulty of observing and determining each individual's contribution to the output of the cooperating inputs. Moreover any individual member of the team can impose undetected costs on the others by reducing his own efforts, that is by "shirking." Thus, for a firm to succeed there must be a net increase in productivity by team production, net of the metering cost associated with disciplining the team. The classical firm emerges as a method of reducing "shirking," and in the interests of all parties to it. It is accomplished through an appointed employer who acts as a specialist in monitoring and checking the input performance of team members. A key question now is: who will monitor the monitor? Alchian and Demsetz answer, in effect, that it will be consumers and competition. The chief monitor is given the residual; the title to the earnings of the team, net of payments to other

inputs, or in other words the profits. This residual of profit, unlike the other earnings can be negative. And since it will be higher, the less the monitor himself shirks, the whole system is automatically self-regulating. The relationship of each team member to the owner of the firm is through a "quid pro quo" contract, and through it the hierarchical structure is mutually agreed on.

If, in contrast, profit sharing socialist firms weaken the hierarchical division of labor, where do we fit in the ability of socialist consumers to choose products and workers choose places of employment?--If socialist constraints upon consumers to choose are imposed, then a new kind of hierarchy will emerge. This will place employee-owned firms at the top and consumers at the bottom. And if bankruptcies are not allowed, new power relationships will evolve. As we shall see, the school is a kind of socialist 'firm'. And insofar as its customers are bureaucratically assigned to it, and with no redress (choice), ultimately it belongs to, and serves the interests of, primarily the suppliers (the leaders and administrators).

The fourth error of the radical critique of present society concerns their diagnosis of "alienation." The first sentence of Marglin's essay contains the concept in his question: "Is alienating work the price that must be paid for material prosperity?" The idea is also central to Herbert Gintis's Ph.D. dissertation "Alienation and Power: Toward a Radical Welfare Economics" (Harvard University, 1969). More significantly for this paper, the word alienation is occurring with mounting frequency in the mid-seventies in the work of American educationists, and especially among the sympathizers with the group of radical socialists so far examined. Thus, five educationists at Stanford University (William H. Behn, Martin Carnoy, Michael A. Carter, Joyce C. Crain and Henry M. Levin), in an article with the telling title "School is Bad; Work is Worse," appropriately complement Marglin's theory with the verdict:

> Alienation from process and product of work are mirrored in the alienation from the school process . . . the dilemma that we face is that we are preparing youngsters only too well for alienated and unfulfilling adult roles. . . . the workplace is hierarchical and alienating. [pp. 63, 4]

Their comments do not merely constitute a normative criticism against the present system; they proceed to positive prediction of its break up; and "alienation" itself has an integral role in the coming disintegration.

> The alienation which has served hierarchical production is now

> turning against the system, not in organized ways, but in the more subtle forms of poor quality of workmanship, wildcat strikes, rising instances of alcoholism, drug usage, employee absenteeism, and employee turnover. [p. 65]

Interestingly these writers explicitly recognize that after the revolution production must continue as a team effort. They demand however:

> . . . a reorganization of the work process so that members of the work team experience a camaraderie and sense of sharing. Gratification from involvement in the work process would replace alienation from it. [p. 65]

Meanwhile, the new literature on the history of education (e.g., Martin Carnoy (1974) and Michael Katz (1971) is repeating the same theme. Carnoy emphasizes, as do Bowles and Gintis, that whilst American schooling brought people out of traditional (feudal) hierarchy. it has also brought them into a new type of stratification in which public education is controlled by capitalists who set the major goals. The result is that "while this process has elements of liberation it includes elements of dependency and alienation." [p. 14]

The error in such thinking is that, insofar as alienation stems from a technological environment, it cannot be eradicated in a socialist society wherein team production is still considered necessary; and few socialist writers realistically believe that assembly lines can, or should be, torn down in favor of a return to individualized cottage handcraft production.

> One can understand only too well alienation in the capitalist world, but it is difficult to grasp how alienation can be completely overcome in an advanced industrial society, even when that society is socialist. Merely changing the relations of production cannot really alter the effect of automation. . . the productive techniques surely remain as impersonal and as intimidating as under capitalism [Cohen (1964), p. 22]

In his writing, Marx fails to give any clear help to his modern socialist followers about what it will be like after the revolution, especially where team work and industrial assembly-line production cannot practically be avoided. In such technology, some elementary discipline is unavoidable.

To the extent that the complaint is that it is the market system that is the main cause of alienation of workers, the radicals fail to

present convincing safeguards against the alienation of consumers. Marx tells us in Capital:

> Since, before entering on the process, his own labour has already been alienated from himself by the sale of his labourpower, has been appropriated by the capitalist and incorporated with capital, it must, during the process, be realized in a product that does not belong to him . . . . the labourer therefore constantly produces material, objective wealth, but in the form of capital, of an alien power that dominates and exploits him. [Marx (1967) p. 571]

It is this Marxian dislike of the dictation of the "blind" forces of market that is probably reflected in the reluctance of Bowles, Gintis and Marglin to mention my suggested "invested pyramids" wherein consumers and workers are on the top and employers are on the bottom. It is true that in the Marxian version of mature capitalism, both the consumers and workers are expressing choices that are not their own. Consumers express only "imaginary appetites" which the system itself has created. But we are not given any convincing account of how 'true' needs are determined. Bowles and Gintis (1976) are at much pains to emphasize the importance of "democratization." Does this mean that decisions are to be made by simple majority voting? If so the preferences of some voters are going to supersede those of others; and what virtue is there in this? Consider, too, the promise that the worker will obtain job satisfaction. Bearing in mind the radical's emphasis on the universal brotherhood of men, it is not clear how the Marxian humanity of expression between worker and consumer will emerge. Since Marx pictured a world of variety, of existing individual tastes and talents, and of dynamic unfolding of new tastes and new talents, there is also a problem of communicating the tastes in one part of the world to the producers in another. Market signals are the cheapest providers of the relevant information, but the market is condemned as 'blind'. Yet nowhere are we given a convincing description of the alternative socialist instrument that is free of blindness, or in other words is 'all seeing'.

Another peculiarity of the modern writing, and especially educational writing is the view that the human personality is exclusively, or predominantly, the product of the work environment. Today's worker, however, spends at least as many hours in leisure time as he does at work. Moreover, as the radical economists concede, capitalism has been "delivering the goods" for many years. One of the "goods" is

increasing leisure. As the number of hours work per day and the number of work days per year fall in the future, the chances of being alienated (if this is a product of the world environment) are likely to fall correspondingly. One often gets the impression that if such a tendency did "threaten," the socialist leaders would want to pass laws against increased leisure in order to force people back to the workplace--the real arena or "school of life"; for the ideology seems to be that nowhere else can they be taught the secrets of creative fellowship, humanity, and self-fulfillment. Compulsory schooling would also be strongly prescribed--and for the same end. There would be little choice of curriculum; and presumably those who teach from a non-socialist approach would be excluded, whether this infringes "academic freedom" or not. In the words of Bowles and Gintis (1976): ". . . revolutionary educators must be in the forefront of the movement to create a unified class consciousness. . . .Pie-in-the-sky politics must be rejected in favor of a program of revolutionary reforms built around such issues as democracy . . . and socialist content of education." [pp. 287-8] (my italics)

PART III

Socialist Strategy on the Schools

Having reviewed the errors in the radical diagnosis of general (social) collapse, we can now return once more to their attitudes to the schools. The new style educational activist clearly seems impatient to impose his own brand of old fashioned benevolent despotism. The public school system is wrong and tyrannical he claims; nevertheless the schools are not to be returned to the people; not at least until socialist leaders have had their turn of enjoyment of the power which they bestow. Martin Carnoy (1974) enthusiastically observes that "there are many people now in the school system willing to work toward changing the hierarchical structure of the society. . . the new education should . . . be designed to create or reinforce a nonhierarchical society, in which property will not have rights over people, and in which, ideally, no person will have the right of domination over another." [pp. 364, 366] Yet in Carnoy's proposed society, some people will have domination over others. These will be the socialist leaders; for the implication is that they alone have escaped the brainwashing of the present system's institutions, despite the fact that most of them have been educated in capitalist dominated public schools. Carnoy admits that ". . . any transformation requires changing people's understanding of the social contract and the meaning of work, responsibility and political participation." [p. 366] He speaks accordingly in praise of those "free" schools in the United States that attempt to

"decclonize" children within the context of a hierarchical society.

But for socialism to triumph, schools of some sort there must be; otherwise there would be no instrument through which to organize the revolution. It is for this reason that the radical socialists dislike the proposal of Ivan Illich (1971) for "deschooling" the society. As Carnoy puts it: "But in the transition towards the reconstructed society, 'free' or 'liberation' schools may be the strongest element in decolonizing people in the society and breaking down its hierarchical structures." [p. 368] Not surprisingly the radical socialists do not favor education vouchers. (Vouchers enable parents to express their free choice among a wide variety of schools with financial "tickets" (vouchers) of equal value to the current cost of their public education.) Their most explicit spokesman against them is Henry Levin (1974):

> But, if the present schools tend to contribute to the reproduction of social class from generation to generation, educational vouchers will surely exacerbate this phenomenon . . . vouchers would make this class stratification and socialization even more "efficient" by making it possible for parents to choose particular primary and secondary schooling environments based upon these [indoctrinated] values [pp. 13, 17]

Indeed the family in general is a suspect institution to the radicals. Bowles and Gintis (1973) warn that "The male-dominated family, with its structure of power and privilege, further articulated according to age, replicates many of the aspects of the hierarchy of production in the firm." [p. 88] Carnoy, meanwhile, seems to be counselling direct attacks on the institution: " . . . in fact it may be necessary to undo behavior patterns learned in hierarchical family structures. . . ." [p. 368]

Thus while socialists complain that the capitalist system has a totalitarian hold on values throughout society, the socialist's own system can be at least as totalitarian. For just as Carnoy insists that the capitalist system has "colonized" people's minds, his new program might "colonize" their minds at least as efficiently; but this time with "true" socialist, instead of capitalist, principles. Socialists will protest that they only want temporary control of the schools. After this initial period, their controls will wither away and their apparent contradictions will dissolve. After this, their actions eventually will be justified, and their full purity finally acknowledged. But many people will have heard all this before and not just in the 19th or 20th century.

The most important paradox remains. It is that whilst the radicals describe the public school system as a capitalist institution it is in fact socialist. It is a system that is based firmly on non-market, collectivist, principles. The impetus for public education came from the non-capitalist elements in America rather than capitalists like Carnegie, Rockefeller, and Vanderbilt. Furthermore, how could the "capitalist" system allow "free schools" and other private schools to exist if educational indoctrination is so crucial to its continued existence? Observe, too, that the users of the public schools--parents and families--have very little power of choice. Instead they are obliged to provide "compulsory customers" to monopoly suppliers; the incomes of the latter, meanwhile, are derived independently of their efforts through a political process that is financed by compulsory taxes. The irony is that whilst the radicals describe the growing state bureaucracies as contributing to the alienation of the capitalist worker, they are reluctant to suggest the possibility of something like the alienation of the consumer. The latter certainly senses "powerlessness" and "isolation" when faced by the large socialist-type bureaucracies; and the present educational one is indeed typical of these.

It will be recalled that Alchian and Demsetz predict that the profit-sharing socialist firm will face problems of monitoring output because the rewards and losses of the central monitor are reduced. The American public school system is of the socialist type that does not even feature profit (or loss) sharing. These is in fact no residual to be shared. In this case, the Alchian/Demsetz model would predict even worse, and this time insoluble, problems of monitoring educational output. The mounting evidence seems to support their model. The number of high school seniors scoring at high levels on the Scholastic Aptitude Tests has dropped dramatically since the mid-sixties. [Malcolm G. Scully (1975)] Colleges and universities are now including remedial composition courses. It has been known for some time that the levels of conventional illiteracy in America have been rising. Now we are informed by a U. S. Office of Education study (1975) that functional illiteracy is also seriously high. More than 23 million American adults, one in every five, lack the basic know-how to function effectively in a complex society. Less than one-half the nation's total adult population between 18 and 65 are really proficient in reading, writing, computation, and problem-solving skills.

Such facts bring into serious question the claim by Bowles and Gintis (1973) that:

> The success of the "cult of efficiency" in education, while obviously secured through the political power of private and

> political corporate elites, would have appeared unthinkable outside the framework of a burgeoning corporate order within which the "system problem" of a stable labor force demonstrated new and creative institutional mechanisms. [p. 82]

If capitalists wanted efficiency in education to provide a labor force that was cognitively well prepared and well drilled, it is strange that they should have selected a socialist institution to do it and strange that employers increasingly complain about the decline in the quality of high school graduates. There is a much more convincing explanation of the growth of the public school system than is now being provided by socialist historians, but this would deserve another essay in itself. Briefly, the origin and subsequent development of internal control of the education system by its suppliers--the teachers and administrators (all of whom have votes and who are more than typically active in voting), is in fact the main explanation.[3] It is easily more persuasive than the socialist's "capitalist conspiracy" hypothesis concerning the growth of power in the schools. Yet it is repeatedly ignored by them.[4] And until the radical economic literature satisfactorily confronts this second explanation, many of its readers must be excused if they see most of the educational problems discussed in this paper in terms of a crisis, not in capitalism, but a crisis in socialism.

[3]See E. G. West (1967) (1975).

[4]Michael Katz (1971) certainly focuses upon the bureaucracy, but he sees it mainly as a tool of powerful political groups rather than a force in its own right and with its own economic interests in establishing security through monopoly. For the modern economic theory of this process see William A. Niskanen (1971).

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